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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JEFFREY M. STEFAN and JASMIN JIJINA

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Appeal 2008-5858  
Application 10/077,013  
Technology Center 2600

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Decided:<sup>1</sup> February 23, 2009

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Before JOSEPH F. RUGGIERO, MARC S. HOFF, and KARL D.  
EASTHOM, *Administrative Patent Judges*.

RUGGIERO, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> The two-month time period for filing appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

## STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection of claims 1-22. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellants' claimed invention relates to the providing of information, such as broadcast information which may include broadcast location coordinate data, to a mobile vehicle user. The broadcast information is presented to the user based on a determination as to whether the broadcast location coordinate data resides within a geographical region defined by a convex hull. (Spec. 2:14-19).

Claim 1 is illustrative of the invention and reads as follows:

1. A method of providing information to a mobile vehicle user comprising:

receiving broadcast information at the mobile vehicle, wherein the broadcast information comprises information location coordinate data;

determining whether the information location coordinate data resides within a convex hull; and

presenting the broadcast information to the mobile vehicle user based on the determination.

The Examiner's Answer cites the following prior art references:

Park	US 5,627,549	May 6, 1997
Dupray	US 6,249,252 B1	Jun. 19, 2001
Stewart	US 6,546,257 B1	Apr. 8, 2003 (filed Jan. 31, 2000)
Wakamatsu	US 6,819,268 B2	Nov. 16, 2004 (filed Oct. 18, 2001)

Claims 1-3, 7-11, 15-17, 20, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wakamatsu in view of Dupray.

Claims 4-6, 12-14, 18, and 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wakamatsu in view of Dupray and Park.

Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wakamatsu in view of Dupray and Stewart.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs and Answer for the respective details. Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived [see 37 C.F.R. § 41.37(c)(1)(vii)].

## ISSUE

*Under 35 U.S.C. § 103(a), with respect to appealed claims 1-22, would one of ordinary skill in the art at the time of the invention have found it obvious to combine Wakamatsu with various secondary references to render the claimed invention unpatentable?*

The pivotal issues before us are whether Appellants have demonstrated that the Examiner erred in determining the obviousness to the ordinarily skilled artisan of

- (i) applying the convex hull geographical area defining teachings of Dupray to the broadcast location area filtering system of Wakamatsu, and
- (ii) further applying the recorded vehicle location teachings of Park and the repeated travel determination teachings of Stewart to the combination of Wakamatsu and Dupray.

### FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence:

1. Wakamatsu discloses (Abstract, Figure 1) a broadcast location data filtering system in which information that is relevant to the area corresponding to the travel location of a vehicle is displayed to the vehicle user.
2. Wakamatsu further discloses (col. 1, ll. 43-54, col. 2, ll. 25-34) the receiving of broadcast information that includes location coordinate data and making a determination as to whether such location coordinate data resides within a defined geographical area.
3. Further disclosed by Wakamatsu is the defining of geographical areas in different ways such as by using area names (col. 9, ll. 28-39) or by using postal code information (col. 5, ll. 42-50, col. 7, ll. 32-42).
4. Dupray discloses (col. 5, l. 66 through col. 6, l. 32) a mobile station location determining system in which a convex hull technique is used for refining, and thereby increasing the accuracy of, the mathematical model determined geographical area location of the mobile station.
5. Dupray further discloses (col. 64, ll. 31-40) the application of the described geographical area determination teachings to vehicle located mobile stations.
6. Park discloses (col. 7, ll. 15-18) the generation of vehicle location data from recorded vehicle location coordinates.
7. Stewart discloses (col. 2, ll. 14-36 and col. 3, ll. 4-8) a teaching of providing information to a mobile unit user based on a determination of a user's "repeated travel pattern."

## PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). “[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Furthermore,

‘there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

*KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Also, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (quoting *KSR*, 127 S. Ct. at 1739). “One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *KSR*, 127 S. Ct. at 1742.

## ANALYSIS

### I. THE REJECTION OF CLAIMS 1-3, 7-11, 15-17, 20, AND 21 BASED ON THE COMBINATION OF WAKAMATSU AND DUPRAY.

With respect to the 35 U.S.C. § 103(a) rejection of independent claims 1, 9, 17, and 21 based on the combination of Wakamatsu and Dupray, Appellants' arguments in response assert a failure by the Examiner to establish a prima facie case of obviousness since a proper basis for the Examiner's proposed combination of references has not been established. According to Appellants (App. Br. 9-13; Reply Br. 3-4), the Dupray reference, relied upon by the Examiner for the disclosure of using a convex hull technique for representing a geographical area in a mobile station location estimating system, has no teaching or suggestion related to the described convex hull technique that would have any application to the disclosed broadcast information receiving system of Wakamatsu.

#### *Wakamatsu*

Initially, we do not find Appellants' arguments to be persuasive in convincing us of any error in the Examiner's interpretation (Ans. 4 and 12) of Wakamatsu as disclosing the receiving of broadcast information that includes location coordinate data and making a determination as to whether such location coordinate data resides within a defined geographical area. (Wakamatsu, col. 1, ll. 43-54, col. 2, ll. 25-34). Wakamatsu discloses the defining of geographical areas in different ways such as by using area names (col. 9, ll. 28-39) or by using postal code information (col. 5, ll. 42-50, col. 7, ll. 32-42).

Further, we find no claimed requirement that the determined geographical area be a predetermined bounded area, as argued by Appellants (App. Br. 9-13) but, nonetheless, find that an ordinarily skilled artisan would recognize a postal code, as used by Wakamatsu, as defining such a bounded geographical area. Similarly, while Appellants contend that Wakamatsu conveys broadcast information based on real time or instantaneous vehicle location and therefore would not be based on historical information, we find no such recitation in any of the argued independent claims 1, 9, 17, and 21. Such arguments by Appellants improperly attempt to narrow the scope of the claim by implicitly adding disclosed limitations which have no basis in the claim. *See In re Morris*, 127 F.3d 1048, 1056 (Fed. Cir. 1997).

*The combination of Wakamatsu and Dupray*

The Examiner has correctly recognized (Ans. 4) that, while Wakamatsu discloses a determination of whether broadcast location data resides within a defined geographical area, Wakamatsu does not disclose that such geographical area is defined using a convex hull technique as claimed. Accordingly, the Examiner has turned to the Dupray reference which discloses (col. 5, l. 66 through col. 6, l. 32) a mobile station location determining system in which a convex hull technique is used for refining, and thereby increasing the accuracy, of the mathematical model determined geographical area location of the mobile station.

In response, Appellants contend (App. Br. 14-15; Reply Br. 3) that Dupray does not make up for the deficiency of Wakamatsu in disclosing the use of a convex hull technique in broadcast data location determination



because Dupray has nothing to do with providing broadcast information to a mobile user. In a related argument, Appellants assert (*id.*) that Dupray does not determine whether information location coordinate data resides within a convex hull as claimed.

To whatever extent, however, Appellants are suggesting that the Examiner's proposed combination of Wakamatsu and Dupray must fail since Dupray does not provide a disclosure of determining whether broadcast location coordinate data information resides within a defined geographic area, we find such contention to be without merit since the Examiner has relied upon *Wakamatsu* for this teaching. It is apparent from the Examiner's line of reasoning in the Answer that the basis for the obviousness rejection is the combination of Wakamatsu and Dupray. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Keller*, 642 F.2d at 425; *In re Merck & Co., Inc.*, 800 F.2d 1091, 1096 (Fed. Cir. 1986).

We also find to be without merit Appellants' argument (App. Br. 9-13; Reply Br. 3-4) that Dupray "teaches away" from any combination with Wakamatsu since, in Dupray, there is no broadcast information sent to a user but, rather, mobile station location information is provided to a third party such as 911 call emergency responders. It is apparent to us, however, from the Examiner's stated position (Ans. 5, 13, and 14) that the Examiner is not suggesting the bodily incorporation of the location determining system of Dupray into the broadcast location area filtering system of Wakamatsu. Rather, it is Dupray's teaching (col. 5, l. 66 through col. 6, l. 32) of using a convex hull technique to refine the determined boundaries of a geographical area location that is relied on as a rationale for the proposed combination

with Wakamatsu's broadcast data area filtering system. "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.... Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." See *In re Keller*, 642 F.2d 414, 425 (CCPA 1981) and *In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973).

Lastly, we find, contrary to Appellants' arguments (Reply Br. 4), that the Examiner (Ans. 5 and 12-14) has set forth an articulated line of reasoning which establishes that the convex hull geographical area determination teachings of Dupray would have served as an obvious enhancement to the broadcast information location data system of Wakamatsu. According to *Leapfrog*, when a combination of familiar elements according to methods known to the skilled artisan achieves a predictable result, it is likely to be obvious.

For the above reasons, since it is our opinion that the Examiner has established a prima facie case of obviousness which has not been overcome by any convincing arguments from Appellants, the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 1, 9, 17, and 21, as well as dependent claims 2, 3, 7, 8, 10, 11, 15, 16, and 20 not separately argued by Appellants, is sustained.

II. THE REJECTION OF CLAIMS 4-6, 12-14, 18, and 19  
BASED ON THE COMBINATION OF WAKAMATSU,  
DUPRAY AND PARK.

This rejection is sustained as well. We find no error in the Examiner's application (Ans. 7) of the recorded vehicle location teachings of Park (col.

7, ll. 15-18) to the system of Wakamatsu as modified by Dupray.

Appellants' arguments (App. Br. 13; Reply Br. 17) rely on the arguments asserted previously against the Examiner's rejection of independent claims 1, 9, 17, and 21, which arguments we found to be unpersuasive for all of the previously discussed reasons.

### III. THE REJECTION OF CLAIM 22 BASED ON THE COMBINATION OF WAKAMATSU, DUPRAY AND STEWART.

The Examiner's obviousness rejection of dependent claim 22 is also sustained. We find no error in the Examiner's line of reasoning (Ans. 10) establishing the obviousness to the ordinarily skilled artisan of applying the "repeated travel pattern" determination teachings of Stewart (col. 2, ll. 14-36 and col. 3, ll. 4-8) to the combination of Wakamatsu and Dupray.

Appellants' arguments in response (App. Br. 14; Reply Br. 18-19) contend that Stewart does not disclose that the determined "repeated travel pattern" defines a mobile unit traveling area, nor does Stewart disclose the receiving of GPS unit information to determine the traveled area. As with the previously discussed rejection of independent claims 1, 9, 17, and 21, however, we do not interpret the Examiner's position as suggesting the bodily incorporation of Stewart's "repeated travel pattern" determining system into the broadcast location data filtering system of Wakamatsu as modified by Dupray. Rather, it is Stewart's teaching of providing information to mobile unit user based on the user's "repeated travel pattern" that is relied on as a rationale for the proposed combination with the combined system of Wakamatsu and Dupray.

### CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that Appellants have not shown that the Examiner erred in rejecting appealed claims 1-22 for obviousness under 35 U.S.C. § 103.

### DECISION

The Examiner's 35 U.S.C. § 103 rejection of claims 1-22, all of the appealed claims, is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

### AFFIRMED

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